

## A further new species of the genus *Aemona* HEWITSON, [1868] from North Vietnam

(Lepidoptera, Amathusiidae)

by

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**Summary:** A new species, *Aemona berdyevi* **spec. nov.**, from the northernmost part of Vietnam (Lao Cai Province), is described and illustrated. The new species differs from those previously known in the combination of the external characters and genitalia.

After the description of 3 new species of *Aemona* HEWITSON, [1868] (MONASTYRSKII & DEVYATKIN, 2003) it has become clear that the structure of this genus is much more complicated than it was suggested by NISHIMURA (1999) who recognized only 2 species: *A. amathusia* (HEWITSON, 1867) and *A. lena* ATKINSON, 1871. At the same time, the key characters for the separation of species within the *amathusia*-group were defined, and another new species was described on the base of new material (DEVYATKIN & MONASTYRSKII, 2004). A further new species was discovered in 2004 in the northernmost area of Vietnam.

Abbreviations: FW - forewing; HW - hindwing.

*Aemona berdyevi* **spec. nov.** (colour plate 15: 1-4)

Holotype ♂: North Vietnam, Lao Cai Province, Vân Bân district, commune Nâm Xây, stream Xông Peng, 1400 m, 25.IV.2004, R. BERDYEV leg.; coll. Department of Entomology, Moscow State University (Russia).

Paratype ♂, the same locality as the holotype, 1400 m, 24-30.IV.2004, R. BERDYEV leg.; coll. Department of Entomology, Moscow State University (Russia).

**Description:** Large-sized; FW apex slightly falcate and termen moderately convex; HW termen conspicuously angled between veins 3 and 4.

Upperside (colour plate 15: 1, 3). Ground colour of both wings rather uniform yellowish ochreous, the basal half (inner of the discal line) with a slight greyish tinge (I suspect this may be visible only in very fresh specimens)

FW: apex and termen narrowly and diffusely brownish; a fine dark streak at the end of cell (upper part); discal line conspicuous, non-interrupted, almost straight but slightly wavy in the apical portion. HW: submarginal lunules very wide (approximate to the discal line), almost regular, outlined with brown, this becoming faint towards tornus.

Underside (colour plate 15: 2, 4). Ground colour of both wings yellowish ochreous, rather similar to that of the upperside, conspicuously darker inner of the discal line; marginal lunules faint, forming a narrow line; discal line robust, non-interrupted, straighter than on the upperside, diffusely shaded with brown from the inner side, bent basad at veins 1 and 8-9. FW with 6 to 7 ocelli, those in spaces 1b and 2 being most well visible and white-pupilled; the others are small or tiny, however mostly filled with white. HW with a full set of 7 ocelli, those in spaces 1c, 2 and 6 white-pupilled, the others being filled with the ground colour. Discal line somewhat wavy between veins 1b and 6.

FW length 44 mm in the holotype and 41mm in the paratype.

♂-genitalia (fig. 1): In general, very large compared to other *Aemona* species; uncus long, almost twice longer than tegumen, rather narrow but conspicuously leaf-like extended, constricted before the tip which is wide and blunt (dorsal view), gently bent (in the holotype) or obtusely angled (in the paratype) down, both parts being almost of equal length (lateral view). Subunci relatively short, less than 1/2 length of uncus, divergent and pointed. Clasp slender but very long (about 1.3-1.5 times longer than that of the largest species, *A. kontumei* MONASTYRSKII & DEVYATKIN, 2003), its distal part ("foot") being 1/5-1/6 length of clasp; end of clasp rounded, with numerous small spines on the tip and ventral side, regularly arranged in a compact field. Juxta irregularly rhomb-shaped (lateral view); its basal process of medium length. Aedeagus much shorter than clasp, evenly curved in lateral view, slightly extended and gently curved or almost straight in dorsal view, with few rather strong spines on a conspicuously sclerotized rib at the left side.

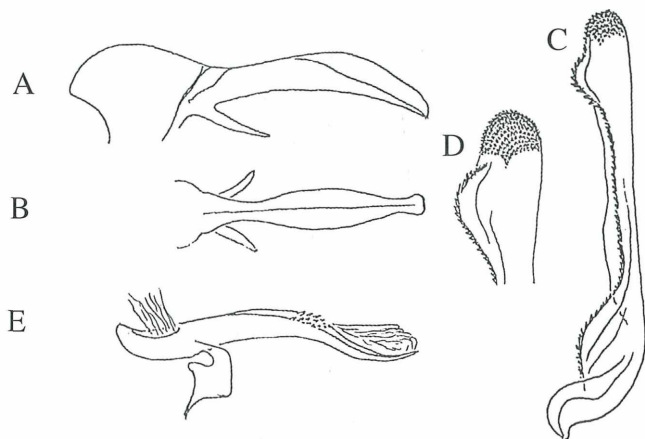


Fig. 1. ♂ genitalia of *Aemona berdyevi* spec. nov. A - tegumen, uncus and subunci, lateral view; B - id., dorsal view; C - left clasp, dorsal view; D - end of clasp, ventral view, enlarged; E - aedeagus and juxta, lateral view.

**Discussion:** The two ♂♂ being described are somewhat different in the details of most their external characters (size, colour tinge, development of ocelli on the underside, shape of the discal line on HW etc.) as well as in the details of the genitalia morphology (lateral shape of uncus, relative length of the "foot" of clasp, dorsal shape and width of aedeagus), so that it was

very difficult to make a description of this new species other than the above rather general one. However, such infraspecific variation seems to be a common case in all species studied before. As it has been shown earlier (MONASTYRSKII & DEYATKIN, 2003; DEYATKIN & MONASTYRSKII, 2004), the key to distinguishing the species in the genus *Aemona* lies in the combination of external and (primarily) genitalia characters; in the case of the new species the latter are the peculiar shape of uncus (resembling *A. falcata* DEYATKIN & MONASTYRSKII, 2004), the very long clasp with a small distal part (as in *A. oberthueri* STICHEL, 1906) and the arrangement of spines near the tip of clasp (somewhat resembling that of *A. amathusia tonkinensis* ROTHSCILD, 1916), apart from the overall size and proportions of the genitalia. The new species represents a one more version of such combination, thus supporting the idea that combined differences are characteristic for the genus (DEYATKIN & MONASTYRSKII, 2004).

A similar pattern of differences was found in the *Faunis aerope* (LEECH, 1890)-group (MONASTYRSKII, 2004) and cannot be excluded to represent a tendency for the whole family Amathusiidae or at least part of its genera.

In general, judging mostly from the male genitalia, the new species seems to be most closely related to *A. oberthueri* STICHEL (West China), from which it nevertheless differs in the shape of wings and the proportions of the main parts of genitalia [for *A. oberthueri* STICHEL see the figure in DEYATKIN & MONASTYRSKII (2004)]. The final conclusion about the relations between these taxa can be made only after examination of large series of both.

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## References

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## Colour plate 15

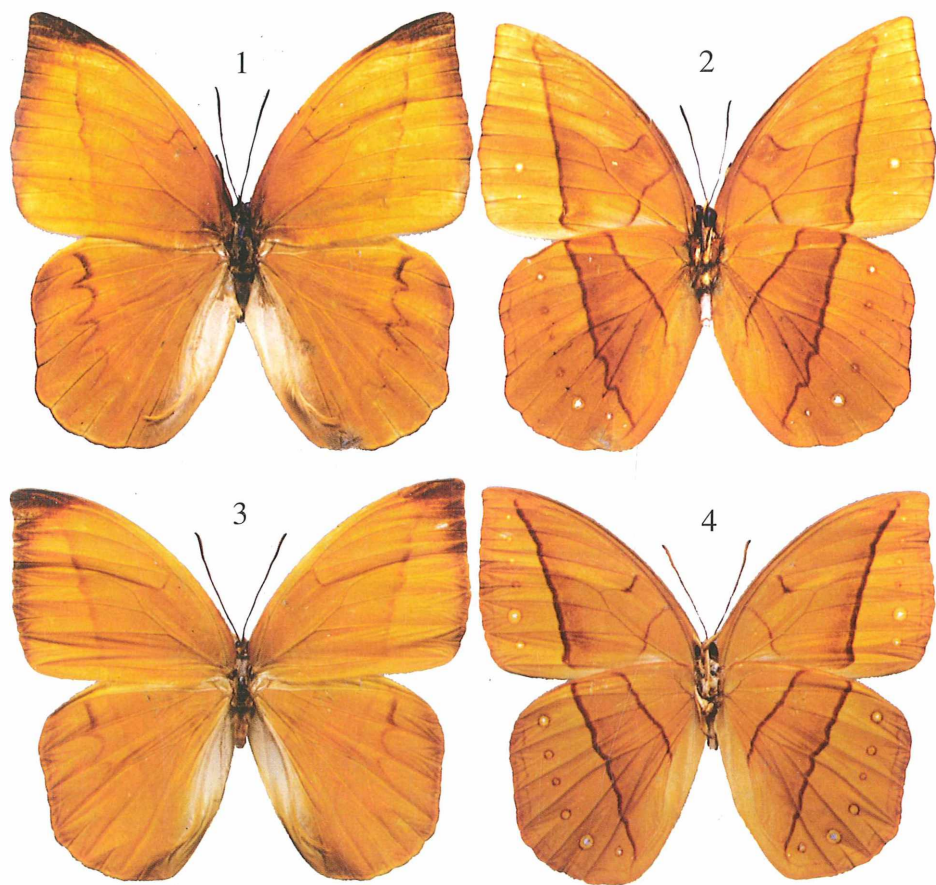


Fig. 1, 2: *Aemona berdyevi* spec. nov., holotype ♂, North Vietnam, Lao Cai Province, Vân Bản district, commune Năm Xây, stream Xuông Peng, 1400 m, 25.IV.2004, R. BERDYEV leg., upperside and underside.

Fig. 3, 4: *Aemona berdyevi* spec. nov., paratype ♂, the same locality and altitude, 24-30.IV.2004, R. BERDYEV leg., upperside and underside.

## Colour plate 16



Fig. 1, 2: *Zela zeta* spec. nov., holotype ♂, Central Vietnam, Thua Thien Hue Province, Huong Thuy district, Duong Hoa commune, evergreen primary forest, 100-400m, 13.V.2005, PHAM MINH HUNG leg., upperside and underside.

Fig. 3, 4: *Zela zeta* spec. nov., paratype ♀, Thua Thien Hue Province, Phong Dien district, loc. Khe Lau, 20.VI.1998, T. H. MINH leg., upperside and underside.

Fig. 5, 6: *Hidari doesoena* MARTIN, 1895, ♂, Central Vietnam, Thua Thien Hue Province, A Luoi district, A Roang commune, 100-350m, restore forest, 24.V.2005, PHAM MINH HUNG leg., upperside and underside.